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AGRICULTURAL METEORANDUM No 517
MONTHLY ISOMERICS & AVERAGE ANNUAL RAINFALL - ENGLAND (except Devon & Cornwall)

L P SMITH

Ag Memo 516 examined the mean monthly isomerics for each county.

These isomerics vary with height as well as geographical position and therefore an attempt was made to link them with average annual rainfall, irrespective of county.

For each annual rainfall range (usually 2 inches, but greater in the higher values) one station from each possible county was taken as a sample. The number of samples in each range varied from 10 to 22. The mean isomerics of these samples was taken as representative for the range.

Wales, Devon and Cornwall were omitted, otherwise the averages contained in M0635 were used.

The results are shown in the Appendix, together with smoothed values for annual rainfalls at intervals of 5 inches.

As annual rainfall increased, the proportion of annual rain usually falling in April, May, June and July decreased; that in October, November, December, January and February increased; rainfall in March, August and September showed little change.

This illustrates the known fact that conventional type rain tends to dominate the drier parts of the country. In the hills and in the wetter areas, it is the winter rainfall that is dominant.

Any comments or suggestions on this paper should be referred to the author.

Meteorological Office
Bracknell
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APPENDIX

RAINFALL ISOMERICS (MONTHLY PERCENTAGES OF AVERAGE) 1916-1950

Average Annual Rainfall (in)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
< 22	8.8	6.4	6.2	7.8	7.8	7.0	10.3	9.0	8.5	9.5	10.3	8.4
22-24	9.0	6.6	6.1	7.4	7.6	6.8	10.1	9.3	8.7	9.6	10.3	8.5
24-26	9.2	6.9	6.2	7.4	7.7	6.6	9.9	9.3	8.4	9.6	10.1	8.7
26-28	9.5	7.0	6.3	7.2	7.6	6.4	9.5	9.2	8.4	9.7	10.2	9.0
28-30	9.6	7.1	6.2	7.1	7.6	6.2	9.3	9.2	8.2	10.0	10.3	9.2
30-32	9.9	7.3	6.5	6.8	7.2	6.1	8.9	9.0	8.2	9.9	10.6	9.6
32-34	10.2	7.3	6.3	6.6	6.9	5.8	8.4	9.0	8.3	10.4	10.9	9.9
34-36	10.0	7.3	6.3	6.5	6.9	6.0	8.6	9.3	8.4	10.3	10.7	9.7
36-39	10.2	7.2	6.2	6.3	6.7	6.2	8.9	9.4	8.6	10.3	10.4	9.6
39-42	10.3	7.6	6.1	6.3	6.6	6.2	8.6	9.2	8.5	10.3	10.5	9.8
42-49	10.7	7.7	6.1	6.0	6.2	6.1	8.3	9.5	8.7	10.7	10.4	9.6
49-60	11.1	7.7	6.0	6.0	6.0	6.0	8.0	9.2	8.9	10.8	10.5	9.8
60	12.3	8.0	6.3	5.6	5.4	5.4	7.0	8.5	9.1	11.2	10.9	10.5

SMOOTHED VALUES

20	8.7	6.3	6.2	7.9	8.0	7.1	10.4	8.9	8.4	9.5	10.3	8.3
25	9.2	6.8	6.2	7.4	7.6	6.7	9.9	9.1	8.4	9.7	10.3	8.7
30	9.7	7.1	6.3	7.0	7.2	6.3	9.3	9.2	8.4	9.9	10.4	9.2
35	10.1	7.3	6.3	6.6	6.9	6.2	8.9	9.2	8.4	10.2	10.4	9.5
40	10.4	7.4	6.2	6.3	6.6	6.2	8.6	9.3	8.5	10.4	10.5	9.6
45	10.7	7.5	6.1	6.2	6.3	6.2	8.3	9.3	8.6	10.6	10.5	9.7
50	11.0	7.6	6.1	6.1	6.0	6.1	8.1	9.3	8.8	10.7	10.5	9.7
55	11.2	7.7	6.0	6.0	5.9	6.0	7.9	9.2	8.9	10.9	10.5	9.8